



METROPOLITAN  
TRANSPORTATION  
COMMISSION

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## Arterial Operations Committee (AOC)

**10:15 A.M. – 12 P.M., Tue., July 8, 2014**

Conference Room 171

Metropolitan Transportation Commission

101 Eighth Street, Oakland, CA 94607

Chair: Saravana Suthanthira, ACTC

Vice-Chair: Donald Shupp, WP Signal

Staff Liaison: Vamsi Tabjulu, MTC

Linda Lee, MTC

For more information, please visit the Arterial Operations website at [http://www.mtc.ca.gov/services/arterial\\_operations/](http://www.mtc.ca.gov/services/arterial_operations/) or contact Vamsi Tabjulu, Arterial Operations Program Manager, at 510.817.5936 or [vtbjulu@mtc.ca.gov](mailto:vtbjulu@mtc.ca.gov)

### Meeting Agenda

1. Introductions (Suthanthira)
  - *Meeting Notes from May 13, 2014*
  - *Updates from Members*
2. Program for Arterial System Synchronization (PASS) (Tabjulu)
  - *FY 14/15 Cycle Update*
3. Next Gen Arterial Operations Program (Lin Zhang)
  - *FY 14/15 Cycle Update*
4. Featured Presentation:
  - *Traffic Signal Asset Management (Edward Fok, FHWA)*
  - *Discussion on Traffic Signal Asset Management in the Bay Area*
5. Other Business (Suthanthira)
6. Adjournment (Suthanthira)
  - *Next Meeting: In order to avoid a conflict with the ITS World Congress in Detroit from September 7-11, the next meeting will be held on **Tue., September 23<sup>rd</sup>, 2014 @ 10:15 A.M.***

**Arterial Operations Committee**  
*Attendees from meeting on May 13, 2014*

#	Name	Agency	Phone No.	E-Mail
1	Abhishek Parikh	Hayward	510.363.7375	abhishek.parikh@hayward.ca.gov
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6	Ananth Prasad	SCL County	408.494.1342	ananth.prasad@rda.sccgov.org
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8	Brian Sowers	Kimley-Horn	925.398.4862	brian.sowers@kimley-horn.com
9	Chirag Safi	Kittelson	916.266.2190	csafi@kittelson.com
10	David Huynh	Fremont	510.494.4484	dhuynh@ci.fremont.ca.us
11	David Mahama	DKS	510.267.6613	dcm@dksassociates.com
12	Donald Shupp	WP Signal	510.276.6400	shupp@wpsignal.com
13	Dustin Hinds	Trafficware	415.215.7007	dustinhinds@trafficware.com
14	Francisco Martin	Fehr & Peers	510.587.9422	f.martin@fehrandpeers.com
15	Frank Penry	GHD	707.523.1010	frank.penry@ghd.com
16	Ganesh Karkee	MTC	510.817.5625	gkarkee@mtc.ca.gov
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19	Justin Calkins	Econolite	925.784.4566	jcalkins@econolite.com
20	Katherine Mertz	Sensys	510.326.9796	kmertz@sensysnetworks.com
21	Lin Zhang	MTC	510.817.5616	lzhang@mtc.ca.gov
22	Linda Lee	MTC	510.817.5825	llee@mtc.ca.gov
23	Mark Spencer	W-Trans	510.444.2600	m Spencer@w-trans.com
24	Matthew Bomberg	ACTC	510.208.7444	mbomberg@alamedactc.org
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27	Patrick Armijo	Advantec	562.441.1776	patrickarmijo@advantec-usa.com
28	Philip Ho	Oakland	510.238.6256	pho@oakland.net
29	Rafat Raie	Walnut Creek	925.943.5843	raie@walnut-creek.org
30	Ramin Massoumi	Iteris	949.270.9527	rmm@Iteris.com
31	Saravana Suthanthira	Alameda CTC	510.208.7426	ssuthanthira@alamedactc.org
32	Shanthi Chatradhi	VTA	408.952.4224	shanthi.chatradhi@vta.org
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**Arterial Operations Committee**  
*Notes from meeting on May 13, 2014*

**1. Introductions**

- Meeting called to order at 10:15 AM in Conference Room 171 of the Joseph P. Bort MetroCenter. All members introduced themselves.

**2. Next Gen Arterial Operations Program**

- Lin Zhang (MTC) said that the Next Gen Arterial Operations Program to improve efficiency and safety along arterials will have a total budget of about \$3.5 million. He said that there was a great response to the call for projects with 21 applications requesting funding of over \$9.1 million. He said that a majority of the applications were requesting adaptive signal systems, with some applications requesting TSP and Bluetooth related ITS elements. He said that MTC staff will evaluate the applications and make recommendations to the MTC Operations Committee for approval.

**3. Focused Group Discussion**

- Linda Lee (MTC) led the discussion on Performance Metrics for Adaptive Traffic Control Systems (ATCS). She said that performance evaluation of the pilot ATCS projects will be important to MTC and opened the discussion to address the following:
  - *What are the appropriate performance metrics to collectively measure performance of all modes? How should these metrics be measured?*
  - *What determines a project as successful, from the agency, consultant and vendor perspective?*
- Vamsi Tabjulu (MTC) said that MTC's PASS projects currently include performance evaluations to measure travel-time savings, stop-delay reductions, fuel consumption savings, emissions reductions, health-care savings due to reduced emissions, etc. He said that traditional before and after travel-time studies may not be sufficient to evaluate the ATCS projects and the methodology needs to be expanded to capture the benefits achieved with the adaptive system.
- Ramin Massoumi (Iteris) said that the ATCS evaluation should include the off-peak hours including weekends rather than the traditional peak hours. He said that the side street delay is an important metric as well. Obaid Khan (Dublin) said that the evaluation should be based on the goals and objectives, and the purpose of the project. He said that following the systems engineering process for every corridor will be helpful to identify project goals. Some of the other comments from the discussion include: measuring system performance at various levels of saturation, data sharing and communication between various agencies, measuring arterial roadway LOS as opposed to intersection LOS, etc.
- David Mahama (DKS) mentioned that the scope of the projects should also include training opportunities for agency engineers and technicians. He said that this is crucial to operate the system effectively for the long term. Don Shupp (WP Signal) said that local vendors are best equipped to serve the long-term needs of agencies rather than out-of-state vendors considering the urgent nature of these services. He also said that the O&M for software based systems is relatively easy compared to the ATCS systems that require hardware modifications.
- Rafat Raie (Walnut Creek) said that local agencies will need to dedicate a lot of resources to effectively operate and maintain the system. This is one problem they have repeatedly encountered after installing an adaptive system in 2010 on Ygnacio Valley Blvd in Walnut Creek. Patrick Armijo (Advantec) said that at a minimum an evaluation period of one year from the project completion is required to achieve meaningful results. He said that the corridor travel time is important than intersection delay. Ananth Prasad (SCL County) said that the county is extremely happy with the performance of the traffic

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responsive system installed on their expressways. One of the main reasons they didn't choose an ATCS system is the high cost of O&M of these systems.

- Brian Sowers (Kimley-Horn) said that complaints from the public or lack thereof should be an important metric. He said that City of San Jose maintains a comprehensive database of complaints they receive and how they were resolved. Matthew Bomberg (ACTC) said that the evaluation should be multi-modal and include transit reliability; spacing between buses; driver speed/uniformity; and bike & ped safety. Shanti Ganji (VTA) said that after the passage of SB 743, the agencies are moving away from LOS evaluations. Saravana Suthanthira (ACTC) said that the CEQA transportation impact evaluation metrics from SB 743 will be known by July 1st.

**4. Program for Arterial System Synchronization (PASS)**

- Vamsi said that project selection for the PASS FY 14/15 Cycle will follow the same schedule as last cycle. MTC staff will evaluate the applications and recommend a list of projects to the MTC Operations Committee for approval at its July meeting. If selected and approved by the Committee, applicants will be notified and the projects will be underway immediately thereafter.

**5. Featured Presentation**

- Matthew Bomberg (ACTC) made a featured presentation on "Complete Streets Considerations in Arterial Operations." The handouts from the presentation are posted on the MTC arterial operations webpage at: [http://mtc.ca.gov/services/arterial\\_operations/aoc.htm](http://mtc.ca.gov/services/arterial_operations/aoc.htm)
- Saravana suggested that due to lack of time the discussion on the topic will continue at a future meeting.

**6. Adjournment**

- The meeting adjourned at 12 P.M.